

## ON A NEW GENUS AND SPECIES OF SCOMBRIDÆ.

BY W. N. LOCKINGTON.

Since D. W. B. Ayres, between the years 1854 and 1863, described nearly seventy species of fishes from the West Coast of N. America, principally from the neighborhood of San Francisco, until my own scattered notes appeared in the Proc. Cal. Acad. Sci. 1876, very little has been done in ichthyology by naturalists resident on this coast. In 1863-1864, Dr. J. G. Cooper, at that time attached to the Geological Survey of Cal., described eight species; and about the same time Mr. A. Garret, during a visit to this coast, described a Murænid fish in a paper principally devoted to the fishes of the Sandwich Islands. All these papers were published in vol. iii. of the Proc. Cal. Acad. Sci.

Meanwhile the ichthyology of this coast has received careful attention from Gill, Günther, and Steindachner, the last of whom visited us with the Hassler Expedition, resided here a short time, and took away with him numerous specimens.

It has for some time been my endeavor to collect together and identify such of the species described by the above authors, and by Girard in vol. x. of the Pac. Rail. Reports, as occur in or near the Bay of San Francisco, and to add to our knowledge of them whatever information I can collect respecting their distribution, life-colors, variations, etc.

In so doing I have met with the following new form.

**CHRIOMITRA**, nov. gen.

Body elongate, fusiform, cleft of mouth wide. First dorsal separated from the second by an interspace, seven or more spurious fins behind dorsal and anal. No corselet or pectoral region, body naked or covered with small scales. Teeth of moderate strength in the jaws, none on the vomer or palatines. A longitudinal keel on each side of tail. Seven branchiostegals. Dorsal spines 15. Pectoral fins inserted at the level of the eye. This genus is distinguished from *Scomber* by the greater number of the finlets, and by the want of a uniform covering of scales; from *Orcynus* and *Sarda* by the absence of a corselet, and the presence of an

interval between the two dorsals; from *Cybiium* by the latter character; and from all these genera by the absence of teeth on either vomer or palatines. From *Auxis* it differs in the absence of a corslet, in the larger size of the teeth, and in the greater number of dorsal spines. Etymology, *κρεια want*, *μικρα stomacher*, viz., corslet.

*Chriomitra concolor*, sp. nov.

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Teeth in a single row, triangular, compressed, those of lower jaw largest, none near the symphysis. Seven or eight finlets behind the dorsal, eight behind the anal; pectoral one-eighth of the total length to the end of the central caudal rays, ventrals small, in length less than  $\frac{2}{3}$ th of the pectorals.

*Description*.—Dorsal outline a regular gentle curve from snout to tail, ventral outline similar to that of dorsal.

Cleft of mouth slightly oblique, maxillary reaching to a vertical from the hinder margin of the eye; its anterior part concealed behind the preorbital when the mouth is closed.

Jaws equal in front, teeth in a single row on the jaws, none on the vomer or palatines. Teeth in lower jaw larger than those in upper, compressed at base, gently curved inwards; those in upper jaw much smaller, compressed, triangular, straight.

Length of head slightly exceeding the greatest depth, and contained about five times in the total length.

Eye slightly oval, its longitudinal diameter contained seven times in the length of the head; snout a little more than one-third of the same length, tapering regularly to the tip; and convex above, as is also the whole upper surface of the head.

Hinder margin of preoperculum with a long shallow sinus, its lower angle extending a little farther back than its upper extremity; lower border almost straight, horizontal. Hinder margin of operculum and suboperculum a regular curve.

Distance from tip of snout to origin of first dorsal contained about  $4\frac{1}{2}$  times in the length to end of central part of caudal; its length of base very slightly less than its distance from tip of snout. Second, third, and fourth dorsal spines highest, thence diminishing rapidly in height to the tenth, the remainder short and apparently isolated.

All the spines are exceedingly slender and fragile; the longest are about equal to one-third the length of the head.

Interspace between the two dorsals about one-fourth of the length of the base of the first dorsal.

Second dorsal commencing half way between the tip of the snout and the origin of the caudal, increasing rapidly in height to the fourth, which is equal to the sixth, and slightly shorter than the fifth, the fifth a little less than half the length of the head. The rays diminish rapidly in height to the eleventh, which is about half as long as the fifth; the remaining rays decrease slowly to the last, which simulates a finlet.

Anal similar in form to second dorsal, but its rays somewhat shorter than the corresponding dorsal ones.

Pectoral pointed, the rays diminishing very rapidly from the fourth to the eleventh from its upper margin; the 11th to 15th rays nearly equal, remaining rays very rapidly shortening. Centre of base of pectoral in a line with a line drawn from the tip of the snout through the centre of the pupil.

Ventrals very small, less than two-fifths as long as the pectorals.

Length of inner side of upper lobe of caudal a little less than  $\frac{2}{3}$ th of the length of the fish (to end of middle caudal rays); lower lobe slightly shorter. Lateral line diverging gradually from the dorsal outline as far as the origin of the second dorsal, where it lies slightly below the upper third of the height, thence curving downwards rapidly to a vertical from the front of the first dorsal finlet, thence in an undulating line along the centre of the depth to the caudal keel.

A low keel, convergent posteriorly, above and below the central keel of the caudal peduncle.

Long narrow scales on the region behind the eye, along each side of the dorsal outline, and on the peduncle of the tail; remainder of body naked.

Color of the upper portions dark steel blue, becoming silvery below; no streaks.

The specimen in the possession of the Cal. Acad. of Sciences was obtained in San Francisco Market, and was probably taken, as were previously examined specimens of this species, in Monterey Bay. It is said to occasionally straggle as far north as San Francisco, or even Tomales Bay.

	Inches.
Total length to end of middle rays of caudal . . . . .	21
Length of head . . . . .	$4\frac{1}{4}$
Greatest depth of body about . . . . .	$4\frac{1}{8}$
Longitudinal diameter of eye . . . . .	$1\frac{9}{32}$
Length of snout . . . . .	$1\frac{7}{16}$
Width between orbits . . . . .	$1\frac{1}{8}$
From tip of snout to origin of first dorsal . . . . .	$4\frac{3}{4}$
Length of base of ditto . . . . .	$4\frac{5}{8}$
From tip of snout to origin of second dorsal . . . . .	$10\frac{1}{4}$
“ “ “ anal . . . . .	$11\frac{3}{8}$
Length of pectoral . . . . .	$2\frac{5}{8}$
Length of upper lobe of caudal, along posterior margin . . . . .	$3\frac{3}{4}$
Length of ventrals . . . . .	1''